UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Inquiry Concerning the	**)**	
Commission's Policy on	**)**	**Docket No. PL98-5-000**
Independent System Operators	**)**	

Post-Conference Comments of the Illinois Commerce Commission

On March 13, 1998, the Federal Energy Regulatory Commission ("FERC" or "Commission") issued a Notice of Conference in the above-captioned docket on Independent System Operator ("ISO") policy. The Commission invited all interested persons to submit pre-conference written comments (not to exceed 10 pages) addressing topics to be discussed at the conference. The Illinois Commerce Commission ("ICC") submitted its Pre-Conference Comments on March 31, 1998. The Commission held its public conference to discuss its policies concerning ISOs on April 15-16, 1998, in Washington, D.C.

The ICC commends the FERC for its leadership in initiating this docket on ISOs and for the extent to which the Commission has gone to seek input on these difficult ISO and industry structure issues. The ICC welcomed Chairman Hoecker's announcement of regional public conferences to be held during the first week of June in Portland, Phoenix, Indianapolis, Orlando, Kansas City, New Orleans, and Richmond. As eleven state Commissions stated in their petition, "The States believe that it is not sufficient to consider each potential ISO in isolation, rather it is more important to look at ISO formation in the context of a regional market environment." "Petition of State Public Utility or Public Service Commissions of States Indicated Herein for Technical Conference or Regional Hearing" at 1. The ICC views the regional conferences announced by Chairman Hoecker as a means to move toward accomplishment of these regional goals.

In its March 13 Notice, the Commission invited all interested parties to submit post-conference comments on or before May 1, 1998. The ICC herein submits its post-conference comments.

The Commission's Notice, as well as the public conference, focused on seven categories of ISO issues. These categories are: (1) Basic Structure and Role; (2) Regulation, Governance, and Independence; (3) Role of States; (4) ISOs and Reliability; (5) ISOs and Transmission Pricing; (6) ISOs and Market Monitoring; and (7) ISOs and FERC Regulation. The ICC's March 31 Pre-Conference Comments adhered to these seven

categories. These Post-Conference Comments will likewise adhere to the seven categories while expanding upon the responses provided by the ICC in its pre-conference comments.[1] The highlighted questions that follow were drawn directly from the Commission's March 13 Notice. The highlighted parts of the answers constitute the ICC's pre-conference comments filed March 31. Following each of the ICC's previous answers is an elaboration of those previous answers.

I. Basic Structure and Role

Q. What is the optimal size of an ISO?
A. ISOs should encompass large regions.

Large ISO size contributes both to efficient reliability maintenance objectives and efficient competitive market objectives.

With respect to reliability objectives, a large ISO will be better able to internalize circumstances and decisions that would otherwise be external to the system operator of a smaller area, and, thereby, threaten overall grid reliability. For example, a large ISO will be responsible for scheduling and have information concerning the effects of transactions which might cause unanticipated flows on a system operator of smaller size. A large ISO will also have more tools at its disposal to mitigate situations that threaten reliability. For example, a larger ISO will have authority over a greater number and range of generators from which to obtain redispatch. Finally, it must be recognized that system operator borders will always involve difficulties in coordination. The fewer borders there are due to large size, the less need to engage in costly coordination efforts.

With respect to competitive market objectives, competition will be enhanced if the number of competing alternative suppliers is increased. Large markets for supply help mitigate horizontal market power resulting from concentration of generation supply ownership. Large markets can also result in the improved efficiency of generator dispatch. Developing a large ISO is one way to facilitate regional power supply markets.

Q. What factors (e.g., transmission technology, legal/jurisdictional distinctions, reliability councils) should affect the size of an ISO?
A. All of these factors, plus more, are likely to be relevant in determining the appropriate size of ISOs.

[1] The ICC also commends to the Commission's attention the "Comments of the Illinois Commerce Commission on the January 15, 1998 Midwest ISO Filing" filed on March 13, 1998 in Dkt. Nos. ER98-1438-000 and EC98-24-000. Those Comments cover many of the same issues addressed here, but in the context of the Midwest ISO application.

It has been argued by some that all of North America could be covered by only a handful of ISOs. Some have argued in favor of a separate ISO for each of North America's separate interconnections (e.g., Eastern, Western, and Texas). Such an outcome may eventually prove efficacious. However, it is not a practical place to start because of the difficulties in coordinating such a large group of interests.

Within the Eastern Interconnection, for example, there likely are physical characteristics of the transmission system (degree of interconnectedness) as well as characteristic arrays of generation and load that might lead to the identification of appropriate boundaries for ISOs. For example: (1) transmission facilities exhibiting a great degree of physical interconnection probably should be in the same ISO; and (2) transmission facilities needed to connect major concentrations of generation with major concentrations of market demand probably should be in the same ISO.

Historical legal/jurisdictional distinctions, such as the location of state boundaries, will be of much less operational and economic relevance in identifying appropriate boundaries for ISOs than are technical/physical distinctions of transmission facilities and likely concentrations of commercial activity. Similarly, the historical artifacts of regional reliability council area boundaries are likely to be useful only to the extent that they already take into account the relevant physical interconnectedness distinctions and commercial activity concentration distinctions.

Q. What are appropriate ISO operational responsibilities?
A. ISOs should have broad operational responsibility.

The ISO should operate all transmission-related facilities. The ISO must have authority to control the operation of all facilities necessary for the provision of non-discriminatory transmission service that it does not directly operate.

Vertical integration of transmission operation with commercial participation in power markets creates very significant opportunities for discriminatory and anti-competitive behavior in the electric industry. Therefore, the link between transmission operation and commercial participation in power markets must be broken. An ISO structure provides a convenient mechanism to break that link.

An ISO that merely directs the activities of existing control area operators is not adequate. A weak ISO, with authority merely to direct transmission operations of entities who also participate in power markets, leaves far too much discretion in the hands of those entities. Transmission operating entities can use that operating responsibility to their own (or their affiliates') discriminatory advantage.

Q. Should the ISO operate SCADA (supervisory control and data acquisition) systems, switches, reactive power devices, transformer switching, phase shifters, and other transmission control equipment?
A. The ISO should operate all transmission-related facilities.

To reduce the opportunity for discriminatory advantage by transmission operators that also participate in power markets, all transmission-related facilities should be transferred for operation by the ISO. As the ICC will explain below, transfer of all transmission-related facilities to the ISO will have the added benefit of facilitating conversion of the ISO into an independent transco or gridco.

Q. Should the ISO control transmission facility maintenance schedules?

A. Yes. ISOs should have exclusive responsibility for scheduling transmission maintenance.

Strategic scheduling of transmission facility maintenance is one way for a vertically integrated utility to discriminatorily advantage its own (or its affiliates') power marketing function or to disadvantage the power marketing function of its competitors. Therefore, transmission facility maintenance should be clearly separated from power market participation. One way to do that is to give the ISO authority for this function.

The ISO must also have authority to order and require transmission facility maintenance to fulfill its system reliability responsibilities.

In addition, because of its impacts on transmission capacity availability, all generators within the ISO's region should be required to submit their generation maintenance schedules for approval by the ISO.

Q. Should the ISO control generation facilities that provide ancillary services, such as reactive power from generation, regulation and operating reserves?

A. Yes. ISO control of some generation is necessary to ensure non-discriminatory transmission service.

The ISO should acquire most, if not all, ancillary services capability through an open bid process. The ISO should make ancillary services available to any transmission customer requesting them. If this approach to ancillary services provision does not work, the ISO must obtain control of generation capacity to provide transmission ancillary services.

Q. Should the ISO be able to direct the generation dispatch decisions of control area operators if the ISO itself is not a control area operator?

A. Yes. The ISO should have control of all control area operator functions related to the provision of transmission service.

The ISO must have this type of authority to provide non-discriminatory transmission service as well as to perform the security coordinator function. The ISO's control over generation dispatch is most critical at times of transmission constraints.

Q. Should the Commission further define the operational features of an ISO (i.e., should the Commission specify additional standards that define what is meant by an effective system operation and control), or should we allow substantial regional variation?

A. The Commission should further define the operational features of an ISO.

Some allowance should be made for regional variations in ISO operations (for example, some ISOs were created through modification of existing power pools). However, the current state of affairs, prominently featuring uncertainty about FERC standards regarding acceptable ISO operations and control parameters, must be clarified. The Commission should, as soon as possible, establish an acceptable ISO operations/control standard. The components of an appropriate operations/control standard are described in the control area operator discussion below.

Q. What is the appropriate role for an ISO with regard to grid planning and expansion?

A. The ISO should have responsibility for transmission planning and identifying the need for grid expansion. The ISO should have authority to construct and own needed transmission facilities.

Control over transmission planning and construction decisions provides a major opportunity for vertically-integrated utilities to advantage their own (or their affiliates') power marketing function and to disadvantage the power marketing functions of their competitors. Therefore, the link between transmission planning/construction responsibility and power market participation must be broken. An ISO structure provides one way to do that.

An ISO must have both the authority and the capability for transmission planning. ISO transmission planning capability involves both information access as well as sufficient technical and analytical expertise.

The ISO must be responsible for identifying the need for grid expansion. The ISO must have authority to require grid expansion according to its transmission plan. The ISO should be permitted to construct and own needed transmission facilities.

Q. To ensure non-discriminatory transmission access, must an ISO be a control area operator?

A. Yes, in most, if not all, cases.

Most control area operator functions are transmission-related. All transmission-related control area operator functions should be transferred to the ISO.

Some control area operator functions are primarily generation-related. Performance of these generation-related control area operator functions may, nevertheless, provide the

operator with unique access to information. If the operator also participates in power markets, the generation-related control area operator function provides an opportunity to manipulate the performance of these functions to discriminatorily advantage its own (or its affiliates') power market position and to disadvantage that of its competitors.

For these reasons, the ICC concludes that, in most cases, the ISO must be the control area operator to provide reliable and non-discriminatory transmission service in its region.

Situations may exist in which benefits of having the ISO perform all control area operator functions may not outweigh the difficulties that arrangement may create. In those cases, other approaches to the discriminatory opportunities of mixing generation-related control area operator functions with power market participation should be developed. Even in those cases, however, all transmission-related control area operator functions should be transferred to the ISO.

Most utilities currently have retail service obligations imposed by state regulators. If the Commission does not require each ISO to be the control area operator for its region at ISO start-up, the Commission should consider phasing in ISO control area operator responsibility as state authorities phase in competition for retail service.

Q. If there is a requirement that an ISO be a single control area operator and that is not feasible or cost-effective over a large area, would the result be an ISO that is too small to achieve other efficiencies like the elimination of pancaked transmission rates?

A. Perhaps. However, there is no apparent reason why a single control area operator would not be feasible or cost-effective over a large area.

If a single, centralized control area for a very large ISO is believed to be too unwieldy, some sectoral control areas within the ISO could be retained. However, as with the single, centralized control area operator model, these sectoral control areas should, in most cases, be operated by the ISO and not by any power market participant.

Q. Would a requirement that an ISO be a control area operator enhance competition and lower barriers to entry in the generation market?

A. Yes, in most, if not all, cases.

All transmission-related control area operator functions must be transferred to the ISO to assure provision of non-discriminatory transmission service. Similarly, confidence in the fairness of power markets will be enhanced if generation-related control area operator functions are not performed by an entity that is also a power market participant.

Competitive entry into electric generation can be inhibited if new market entrants must rely on generation supply competitors to also provide the control area operator function.

Commission policy should favor the model of ISO as control area operator, but not necessarily mandate adopting that model. ISO developers that propose an ISO that is not a control area operator should bear the burden of demonstrating the benefits of that model in their particular circumstances.

Q. Does an ISO member that is also a control area operator have access to information that gives it an unfair advantage if it is also a market participant?

A. Yes, the control area operator will have unique access to information. In most cases, the advantage provided by that access will be unfair.

Exercise of the control area operator function provides unique access to valuable information about, for example, generation dispatch from which marginal generation cost can be deduced. That information advantage creates a discriminatory opportunity for manipulation if the control area operator is also a power market participant. For this reason, in most cases, the control area operator function should be separated from power market participation. Assigning the control area operator functions to the ISO provides one way to do that.

Q. Are ISOs merely part of a transitional phase for the electric industry or will ISOs be a permanent fixture in the industry structure for the foreseeable future?

A. ISOs are likely to be a transitional phase.

Properly structured and appropriately constituted ISOs could provide many of the benefits of non-discriminatory transmission access, competitive regional power markets, and grid reliability maintenance/enhancement. The Commission has the authority to require appropriately constituted and properly structured ISOs to operate across the country in the relative near-term. ISOs are a feasible industry structure step and will accomplish many of the Commission's electric industry policy goals. The Commission should, therefore, proceed to require formation of ISOs.

However, the ISO industry structure is not the end-game. The ISO structure involves too many unclear incentives for action, too much uncertain liability and accountability, too many fuzzy objectives, and requires too much governmental heavy-handedness for it to constitute an appropriate electric industry structure for the long-term. Therefore, while it should encourage and require ISOs as a near-term measure to address existing industry structure problems, the Commission should not permit ISO formation to thwart evolution to more appropriate industry structures.

Q. Is an ISO a stepping-stone to the independent regional transmission grid company?

A. Yes, it can be.

As the ICC will explain below, ISOs should be designed to facilitate evolution toward independent transcos or gridcos.

Q. Should ISOs be designed consistent with the possible evolution to a regional gridco (i.e., a company that both owns and operates the high voltage grid)?

A. Yes. ISOs should be designed to accommodate such evolution.

Because there is much confusion on this matter, the ICC believes it useful to define the way the terms "gridco" and "transco" are used by the ICC in these Comments. The ICC will use the word transco to refer to a company that owns or owns/operates transmission facilities, but does not itself participate as a merchant in power markets. The ICC will use the word gridco to refer to a company that owns or owns/operates transmission and distribution facilities, but does not itself participate as a merchant in power markets. An independent transco or an independent gridco performs its functions completely independently of the influence of any power market participant or coalition of power market participants. Establishing an independent transco or gridco will require divestiture (either voluntary or mandatory) of transmission facilities. An ownership interest of any kind in the transco or gridco by a market participant or affiliate of a market participant would make the transco or gridco, by definition, not independent.

It is the ICC's position that policy makers should encourage the development of independent distribution companies ("discos") and independent transcos rather than integrating the provision of transmission service and distribution service in a gridco. Transcos and discos, rather than gridcos, are favored for the following reasons. Transcos will need to be very large, in most cases, to achieve economies of scale in transmission facilities ownership. Distribution facilities ownership, on the other hand, is unlikely to be characterized by strong economies of scale. The functions of discos will be primarily state-jurisdictional. The functions of transcos will be primarily FERC-jurisdictional. Similarly, state oversight of the distribution function will be simplified if the existence of multi-state distribution ownership is minimized. This minimization goal would be violated by a gridco striving to achieve economies of scale in transmission. Finally, there may be discriminatory opportunities in the integrated ownership/operation of both transmission and distribution facilities that lends itself to separating these functions into transcos and discos.

The issue of electric industry structure evolution is critically important to a competitive economy. Indeed, as the ICC stated in its "Report to the [Illinois] Senate President" in August, 1997 concerning pending electric industry legislation in Illinois, "The most effective way to prevent electric utilities from using their transmission assets in anti-competitive ways would be to require that all utility-owned transmission assets be divested for ownership and operation by independent transmission owning companies that do not also own generation." Report at 12. The ICC went on to state, however,

that "the ICC also is realistic enough to realize that accomplishing full divestiture of utility transmission at this time would be a major undertaking, would encounter stiff utility resistance, and may have some uncertain consequences." Id. The ICC, therefore, recommended that the Illinois legislature consider the electric industry proposal then pending before it (which featured mandatory participation in ISOs by Illinois utilities) as "an initial step toward creation of an electric industry structure and electricity market structure in which competition can truly flourish." Id. An electric industry structure in which competition could truly flourish would include independent transcos and independent discos.

The ICC believes that, with respect to ISOs and electric industry structure, taking a positive step that is timely and possible is better than undertaking a massive leap toward the ideal if that massive leap is doomed to failure. Pursuing the interim step of ISOs is more likely to lead, ultimately, to an industry structure featuring independent transcos and independent discos than attempting to force the creation of transcos and discos in one fell swoop.

Also, if ISOs are carefully crafted, they will facilitate, rather than postpone, the evolution to a transco and disco structure.

The Commission should encourage transco proposals driven by market forces or by state authorities. The Commission should seriously consider any transco or gridco proposal that comes before it. However, the Commission should not permit the pursuit of transcos or gridcos to perpetuate the discriminatory and inefficient electric industry structure with which we now find ourselves. Similarly, the Commission should not be distracted by utility-controlled, sham transco or gridco proposals masquerading as independent transmission owner/operators.

Q. Are there features of ISOs (e.g., stakeholder boards, not-for-profit status, ISOs serving as the operator of the PX) that will either enhance or inhibit their possible evolution into gridcos?

A. Yes. The Commission should not permit features that inhibit such evolution to remain in ISO proposals.

ISOs should be designed to fill a transitional role in electric industry structural evolution. ISO proposals, therefore, should be stripped of features that tend to lock in the ISO structure in the face of superior industry structure alternatives. ISOs should be encouraged or required to include provisions that enhance their evolution into transcos or gridcos.

With respect to the Midwest ISO, the ICC specifically identified two features that would tend to lock in the ISO structure: (1) the term of the ISO; and (2) the extent of rights reserved by transmission owners. The Midwest ISO applicants proposed a thirty-year term for the ISO. The ICC recommended that the initial Midwest ISO term be no more than ten years to avoid locking in an industry structure that is likely to prove sub-optimal.

The ICC also argued that rights reserved for transmission owners by the Midwest ISO proposal would have the effect of perpetuating discriminatory transmission service and, therefore, transmission-owners' incentives to retain the ISO structure. The ICC argued that the only exclusive ownership rights transmission-owning members of an ISO should be permitted to retain are rights to earn the approved regulated return on the facilities and legitimate economies of scope in combined ownership of transmission facilities and other legitimate business pursuits. If the ISO structure successfully removes the discriminatory advantages of combining transmission facilities ownership/operation with other business pursuits (such as power market participation), as well as the discriminatory advantages of transmission operation, then utilities will have few remaining reasons to resist market and policy-maker demands to move to divesting utility transmission facilities to an independent transmission owning/operating company such as a transco or gridco.

Designing ISOs as non-profit entities may also hinder evolution to independent transcos or gridcos. For example, the Midwest ISO applicants propose that the Midwest ISO be a non-stock, not-for-profit corporation. Such a status may have tax benefits (avoidance of double income tax incidence). However, it makes it problematic for the ISO to either own transmission facilities or to lease transmission facilities from current transmission owners due to tax consequences from threat of loss of non-profit status. As the ICC pointed out in its Comments on the Midwest ISO proposal, leasing of transmission facilities by the ISO would constitute a more formalized mechanism of facilities transfer, thereby enhancing independence. ISO ownership of transmission facilities would ease new facilities construction problems as well as establishing a better basis for transition to an independent transco or gridco structure.

The Illinois Electric Competition Law of 1997 requires Illinois utilities to join a regional ISO. For those that don't join an approved regional ISO, a specified process to establish an Illinois ISO will commence. Illinois Law requires that, if an Illinois ISO is formed, the Illinois ISO will be incorporated under the Illinois Business Corporation Act of 1983. 220 ILCS 5/16-126. The Illinois Legislature has determined, therefore, at least for an Illinois-only ISO, that a for-profit ISO structure is preferable.

Another feature that may inhibit evolution of the ISO into a transco or gridco is the combination of ISO and PX functions into one entity. An independent transco or gridco, by definition, could not perform the power exchange or power pool function since doing so would make it not independent. That function constitutes power market participation. It would likely be much easier to move from an ISO to an independent transco or gridco structure if the ISO is not also required to perform a PX function.

A proliferation of single-state or small ISOs will complicate evolution of the industry to independent transcos or gridcos. Single-state or small ISOs will create entrenched interests and can more easily concentrate local and state political power into structural inertia. Effecting change under such circumstances can be very difficult.

Finally, requiring transfer of all transmission facilities and transmission-related facilities for operation by the ISO will ease the transition to an independent transco or gridco structure because the transco or gridco will ultimately need to control and operate these facilities anyway.

Q. What changes in ISO structure would be necessary to enable an ISO to more easily evolve into a gridco?
A. No comment at this time.

As explained in the previous Q&A, the Commission should encourage ISOs that: (1) have a term long enough to support contractual certainty but not so long as to lock in an inappropriate industry structure; (2) are designed to strictly minimize reserved rights for transmission-owners; (3) permit the ISO to lease or own transmission facilities (this may prevent ISOs from qualifying under not-for-profit tax exemptions); (4) are for-profit corporations under statutes such as the Illinois Business Corporation Act of 1983; (5) do not combine both ISO and PX functions in the same entity; (6) do not constitute a proliferation of single-state or small ISOs; and (7) operate all transmission-related facilities.

Q. Is a gridco (either for-profit or non-profit) preferable to a non-profit ISO that does not own transmission facilities?
A. Yes. The independent gridco is the preferable industry structure.

The ICC believes that for-profit, private or investor-owned, independent transcos or gridcos constitute the industry structure that policy-makers and regulators should be striving toward. As explained above, the ICC favors the independent transco structure. While independent transcos or gridcos would remain monopolies and require regulation, this industry structure better aligns incentives while ensuring non-discrimination than any of the alternatives. An independent transco or gridco industry structure also removes many of the vertical integration problems currently plaguing the electric industry. Under a transco structure, for example, provision of reliable transmission service would become the focus of a business enterprise. A for-profit transco or gridco would operate under clear objectives and would be accountable for its actions.

The principal vertical integration problem currently plaguing the electric industry and causing discriminatory treatment or the appearance of discriminatory treatment is the integration of transmission operation with power market participation. An appropriately constituted and properly structured ISO will reduce or eliminate this vertical integration problem. A properly designed independent transco or gridco would also eliminate this vertical integration problem.

Another vertical integration problem plaguing the electric industry is the integration of transmission facilities ownership and power market participation. A properly designed independent transco or gridco would also eliminate this vertical integration problem. An ISO does nothing to mitigate this vertical integration problem.

Similarly, in searching for an appropriate electric industry structure, policy-makers should analyze the anti-competitive problems or perception of problems associated with integration of: (1) transmission facilities ownership with distribution facilities ownership; (2) distribution facilities ownership with distribution facilities operation; (3) distribution facilities operation and power market participation; (4) distribution facilities ownership and power market participation.

In determining what electric industry structure to pursue, policy-makers should balance anti-competitive effects, or perception of anti-competitive effects, of various possible integrated industry ownership/operations configurations against legitimate economies of scope between those ownership/operations configurations, keeping in mind that discriminatory advantages are not legitimate economies of scope.

An ISO industry structure, for example, discards economies of scope in combined ownership/operation of transmission facilities. The independent transco or gridco structure, on the other hand, recognizes these economies by combining transmission ownership and operations in the same entity.

The industry structure must eventually balance costs of continuing discriminatory opportunities and the societal benefits of realization of economies of scope. For example, expectations for anti-competitive behavior by entities with integrated transmission ownership and operation, such as transcos or gridcos, should lead policy-makers to an industry structure featuring independent transcos or gridcos whose facilities are operated by an ISO. Similarly, if the balance is struck at some other point on the continuum, another industry structure would be preferred.

Q. Should the Commission encourage the formation of other transmission entities, i.e., private for-profit or government owned transmission entities?

A. Yes. The Commission should investigate various alternatives to facilitate the transition to independent grid ownership and operation.

The Commission should, as soon as possible, mandate appropriately constituted and properly structured ISOs because the Commission already has clear authority to do so under Section 205 and 206 of the Federal Power Act and the need to reduce the anti-competitive aspects of integrated transmission operation/power market participation (the principal vertical integration problem facing the electric industry and the principal problem ISOs are intended to address) is urgent.

At the same time, the Commission should encourage development of for-profit, independent transmission entities, either transcos or gridcos (the ICC favors transcos as explained above). A major way to encourage formation of transcos or gridcos is for the Commission to enforce ISO standards that reduce or eliminate the anti-competitive advantages of transmission operation and ownership for entities that wish to remain in

the power merchant business. As the advantages in integrating transmission ownership or operation with power market participation are reduced, transmission owners will perceive less business interest in retaining transmission ownership and present less opposition to divesting transmission facilities to an independent transco or gridco. Conversely, the more rights the Commission permits vertically-integrated transmission-owning utilities to retain within the ISO structure, the more entrenched the ISO structure will be.

The Commission should not encourage government-owned transmission entities. While transmission service is likely to remain a natural monopoly function for the foreseeable future, thereby making it a likely candidate for government operation, the preferable model is one featuring government regulation of private or investor-owned transmission companies because private or investor-owned entities have clearer incentives and clearer objectives (the profit motive).

Transcos could be regulated by the FERC as monopolies under traditional cost of service regulation, performance-based regulation, or some kind of light-handed regulation. The result, in any event, would likely be better than reliance on government-owned transmission entities.

Q. Would other types of transmission entities be better suited to sustain competition?

A. Yes. An independent regional transmission grid company would be better suited to sustain competition.

ISOs are not the end-game. The ISO industry structure is one that can reasonably be implemented in the relative short-term and can be expected to reduce the principal vertical integration problem currently plaguing the electric industry. However, in the long term, the ISO industry structure is not best-suited to sustain electric competition.

As stated above, the Commission and other policy makers should encourage evolution of the electric industry to properly designed, independent, privately or investor-owned, government-regulated, for-profit transcos.

II. Regulation, Governance, and Independence

Q. Should the Commission encourage or define a particular form of ISO governance beyond the independence principle?

A. No. Provided that they remain within a revised independence principle and Commission standards, ISO governance should remain an issue for stakeholders, especially non-transmission owning stakeholders, to work out. When one particular form of ISO governance proves uniquely superior, that form should be adopted by all ISOs.

The Commission must, as soon as possible, clarify its policies concerning ISO independence and issue detailed standards for acceptable ISO independence. The Commission's current, weak ISO independence principles, lead, at best, to utilities' filing of flawed ISO proposals such as that of the Midwest ISO. At worst, the Commission's ISO principles lead to the breakdown of ISO development activity, such as that experienced in the Northwest by INDEGO, or to no ISO development activity at all as experienced in many other regions of the country.

The ICC favors a disinterested ISO Board governance structure that includes requirements for members with particular areas of expertise and is assisted by an advisory board of interested stakeholders. Provisions for a State Commission advisory role should also be included. It is much too early in the ISO development stage, however, for FERC to mandate the adoption of any particular governance structure for all ISOs.

Q. Should the Commission establish additional standards in the area of governance, but allow reasonable variations on a regional basis?

A. Yes. The Commission's current undefined independence principle should be revised through more detailed standards because it provides too much leeway for transmission-owning utilities.

As explained above, governance is a major element of ISO independence. However, governance is only one element of ISO independence. It is the Commission's ISO independence policies that desperately need clarification. Furthermore, it is the Commission's hesitance to take control of the ISO formation process from the vertically-integrated transmission-owning utilities that has led directly to development of ISOs that would be beholden to vertically-integrated transmission-owning utilities, rather than being independent entities. The Commission must clarify the acceptable elements of ISO independence as soon as possible.

Q. Because transmission system owners do not have a controlling vote in an ISO, should the owners be allowed to establish any ISO rules that cannot be changed by vote of the ISO Board, as a condition for the owners to join the ISO

A. No. Transmission-owning utilities should not be permitted to establish ISO rules in their favor. Membership in ISOs should be mandatory. Incentives for transmission-owning utilities would, therefore, be unnecessary.

Currently, the voluntary ISO development process is being driven by transmission-owning utilities. Therefore, it should not be surprising that utilities will not agree to voluntarily transfer operation of their transmission assets to an ISO unless their principal business interests in transmission ownership/operation are protected. This protection shows up in the form of extensive reserved rights of transmission owners in ISO operating agreements and bylaws. These reserved rights of owners, if approved, practically guarantee that the ISO will not be independent but will, instead, serve the

interests of the transmission-owners. The Midwest ISO, for example, is critically flawed in this regard.

The Commission must remove transmission owners from the ISO "driver's seat" as soon as possible. The Commission need not allow transmission-owning utilities to dictate conditions under which they will participate in an ISO. The Commission need not create incentives for utilities to join an ISO. Instead, the Commission should exercise its authority under Sections 205 and 206 of the Federal Power Act to require development of properly structured ISOs and require participation of transmission-owning utilities in those ISOs so as to make ISOs appropriately constituted regionally.

Q. Should the ISO have the authority to modify transmission tariffs and operating rules without seeking the approval of the transmission owners?

A. Yes. The ISO must have this authority if it is to be independent of transmission-owners.

Transmission owners should have no greater role in modification of ISO transmission tariffs than any other ISO transmission customer. The ISO must provide a non-discriminatory transmission service to all eligible customers. Transmission owners should be treated the same as other eligible transmission customers. Decisions about ISO transmission tariffs and operating rules should be an exclusive ISO Board function (with regulatory approval).

Q. Should the Commission require more specificity on the division of liability between the transmission owners and the ISO?

A. No comment at this time.

The problem of uncertain liability locus stems from the nature of ISOs. The problem is increased under the non-profit ISO form. The result is uncertain degrees of ISO accountability. Under an independent transco or gridco structure, on the other hand, liability questions would not arise because the transco or gridco could be held accountable for all functions for which it is responsible.

Other than urging the rapid evolution to an independent transco or gridco structure, the ICC has no recommendations on the ISO liability split problem.

Q. If the Commission is satisfied that an ISO's governance arrangements ensure independence (i.e., are neutral relative to the economic interests of different classes of market participants and to different states), should the Commission give more deference to the decisions made by the ISO governing board?

A. Yes. In such circumstances, more deference to the ISO Board would be appropriate.

First of all, the Commission should not approve any ISO where it is not entirely satisfied that the ISO's governance arrangements ensure independence. Therefore, there is no need to consider the degree of deference that FERC should give an independent ISO Board vis-a-vis the degree of deference FERC should give a non-independent ISO Board because FERC should not permit any non-independent ISO Board to operate.

A greater degree of Commission deference to the transmission operating decisions of a properly structured independent ISO is warranted compared to the degree of deference that would be accorded to a transmission operator that is also a power market participant. This is because, in the case of a transmission operator that is also a power market participant, the Commission must carefully analyze the transmission operator's behavior in order to police, as best as possible, attempts to discriminatorily advantage the transmission operator's (or its affiliates') power market function. In the case of a properly structured ISO, that concern does not exist.

However, the ISO will be a monopoly in the provision of transmission service, and will have some incentives similar to any transmission operating monopoly. Government regulation in these areas must be as strong as ever to prevent the exercise of monopoly power.

Q. Are there streamlined or light-handed regulatory processes that would allow independently governed ISOs to make needed rule changes while still ensuring that the Commission can function as a "backstop" to protect the public interest?

A. Yes.

As indicated above, when the Commission is assured of ISO independence, it may implement light-handed regulation over some aspects of ISO operation. Other aspects of ISO operation will require as much regulation as ever because of the ISO's monopoly in transmission operation.

Q. Do the operational features of power systems require that the ISO and PX be one and the same in order for the marketplace to operate efficiently, or can efficiencies be maximized if such institutions operate independently?

A. In most, if not all, cases, the PX should operate independently of the ISO.

There are many benefits in integrated ISO transmission operation and PX provision of power exchange services. However, integration of ISO and PX functions also creates opportunities for discriminatory treatment of PX transactions. Even if the ISO does not engage in such discriminatory behavior, the perception of unfair treatment on the part of participants in bilateral transactions may still exist.

It is the ICC's position that efficiency benefits of combined ISO and PX operations do not outweigh the potential costs of discriminatory action or potential costs of skewed market activity that may arise from the perception by bilateral market participants of discriminatory action by the ISO acting in combination with the PX.

Q. Should we require that an ISO be associated with a PX? If so, under what conditions?

A. In most, if not all, cases, the Commission should not mandate that a PX be associated with the ISO. Power exchanges are likely to develop, as necessary, to meet market needs unless artificial barriers are erected.

In most cases, mandating a monopoly PX will constitute unwarranted government intrusion in markets. Mandating the participation in a PX of generators with market power, may, however, be appropriate.

Nevertheless, complete reliance on bilateral energy contracts may be inadequate to create the type of robust, transparent, regional competitive market in power sales that would benefit all customers. Consequently, FERC must ensure that no ISO governance structure contain provisions that would prevent or hinder the market-driven or state regulator-driven development and formation of (a) power exchange(s)/power pool(s). The Commission's policy should encourage development of private or investor-owned PX companies to fill market needs.

Illinois Law states,

> If a spot market, exchange market, or other market-based mechanism providing transparent real-time prices for electric power has not been developed, the independent system operator or a closely cooperating agent of the independent system operator may provide an efficient competitive power exchange auction for electric power and energy, open on a nondiscriminatory basis to all suppliers, which meets the loads of all auction customers at efficient prices. 220 ILCS 5/16-126(e).

Any ISO operating in Illinois or any "closely cooperating agent" of an ISO operating in Illinois must have the authority and the ability to comply with this requirement of Illinois Law.

III. Role of States

Q. ISOs are likely to become increasingly important as states restructure retail electric markets and retail choice becomes more widespread. States will continue to have a critical role in encouraging and shaping the formation of ISOs. Once an ISO is formed, however, what is the appropriate role of the states?

A. State authorities have a continuing role in facilities siting, reliability maintenance, monitoring and remedying local distribution/transmission interface conflicts, generation market monitoring, market power mitigation, among other things.

FERC's ISO policy cannot change established State Law. State regulators will continue to administer and implement the state laws they are charged with administering and implementing. Regardless of the status of ISOs, state authorities will have a continuing role in facilities planning, facilities siting, reliability maintenance and enhancement, facilities interconnection, local distribution/transmission interface issues, generation market monitoring, market power mitigation, generation supply adequacy, service delivery quality, retail service rates, retail market complaints, as well as any other issues that fall within state purview. FERC's ISO policy cannot alter any of these state jurisdictional responsibilities.

With respect to the activities of the ISO, states should be afforded a formal advisory role to the ISO Board. States also have an overall interest in ensuring that pursuit of their separate parochial interests do not swamp the benefits of mutual cooperation. States should attempt to establish regional arrangements for addressing regional issues, including ISO matters.

Q. What should be the role of the state in such matters as: reviewing ISO grid expansion plans; determining whether the ISO, the original transmission owners, or third parties should own additions to the grid; enforcing obligations for right-of-way maintenance; and resolving disputes over transmission and local distribution interfaces?

A. State authorities have a major, and, perhaps, principal, role in all of these areas.

See previous Q&A.

Q. Should ISOs have advisory committees that include state commission members?

A. Yes. State authorities must have a formal, and defined, role in the ISO advisory process.

The ICC favors a disinterested ISO Board structure that includes requirements for members with particular areas of expertise and is assisted by an advisory board of interested stakeholders. State commissions should have a formal, and defined, role in advising the ISO Board. However, state commissions must remain sufficiently separate so as to be able to exercise any enforcement authority that is necessary and for which the state has jurisdiction.

State commissions are not "stakeholders" as that term is often used in the ISO context. State commissions represent the "public interest" rather than any particular private

interest like other stakeholders represent. Pursuit of the public interest involves the balancing of many private stakeholder interests. Therefore, state commission participation as a voting member in a stakeholder ISO board structure would be misplaced. Similarly, state commission participation as an equal member in a stakeholder advisory committee to a disinterested ISO board structure would also be awkward. Therefore, state commissions must fill a unique advisory / participatory / regulatory role with respect to ISOs. ISO governance should allow for this role.

Q. Is there an appropriate role for joint boards between this Commission and affected state commissions?

A. Perhaps. In the absence of a regional regulatory authority, the joint board mechanism may be appropriate.

Power markets are rapidly becoming regional. Regionalization will accelerate as state policy-makers adopt retail competition models for previously-regulated retail power markets. This regionalization will translate previously state-specific issues, such as facilities planning and siting, into regional issues. Similarly, previously state-specific approaches to market power analyses and market power mitigation will only be implementable, in many cases, on a regional basis in the future.

The joint board process for decision making is described in Section 209 of the Federal Power Act. The joint board process may be a workable mechanism for addressing regional regulation issues. However, the joint board process can be undertaken only at the Commission's initiative and may address only matters that the Commission has jurisdiction to address. These are major deficiencies in the joint board process.

A better approach to regional issues in the electric industry would be to have state authorities coordinate regional approaches to regional regulation and policy issues on their own initiative. In some cases, it would then be appropriate for FERC to defer to the decisions of the regional state organizations on issues that otherwise would be exclusively FERC's.

Q. How should the states' role differ with respect to single-state ISOs vis-a-vis multi-state ISOs?

A. The state role is stronger with respect to single-state ISOs. However, in most cases, a single-state ISO will prove less efficient than a multi-state ISO.

The role of any one particular state is of higher profile with respect to single-state ISOs. In the context of multi-state ISOs, the profile of each individual State is diluted. However, the responsibility of individual states is no different with respect to a multi-state ISO than it is with respect to a single-state ISO. State Commissions must continue to administer and implement state law. The way states will go about exercising their responsibility and authority will be different in the multi-state ISO context. For

example, state authorities will find it more effective to enter into cooperative arrangements with authorities from other states in the region.

Single state ISOs will, in most cases, be too small to achieve efficiency thresholds. Illinois Law requires an Illinois-only ISO to be formed if : (1) Illinois utilities have not joined an ISO by June 30, 1998; or (2) FERC has not approved such ISO application by March 31, 1999. It is, therefore, important for the FERC to act on the Midwest ISO before March 31, 1999, because creation of an Illinois-only ISO would not be in the best interests of Illinois or the Midwest Region.

IV. ISOs and Reliability

Q. Are there opportunities for regional ISOs to address reliability concerns and thereby maintain, and even enhance, the reliability of the transmission grid in an open access environment?

A. Yes. Regional ISOs are critical for future efficient grid reliability.

A large regional ISO will be better able to internalize circumstances and decisions that would otherwise be external to the system operator of a smaller area, and, thereby, threaten overall grid reliability. For example, a large regional ISO will be responsible for scheduling and have information concerning the effects of transactions which might cause unanticipated flows on a system operator of smaller size. A large regional ISO will also have more tools at its disposal to mitigate situations that threaten reliability. For example, a larger ISO will have authority over a greater number and range of generators from which to obtain redispatch. Finally, it must be recognized that system operator borders will always involve difficulties in coordination. The fewer borders due to large size, the less need to engage in costly coordination efforts.

Q. Should an ISO have a special relationship with regional reliability authorities or should it establish its own mandatory reliability rules?

A. The answer depends on how the Commission resolves the problem of vertically-integrated utility dominance of NERC and the regional reliability councils. It may be appropriate for the regional ISOs to assume all responsibilities currently held by the regional reliability councils, and for the existing regional reliability councils to be dissolved.

The current governance and structure of the North American Electric Reliability Council ("NERC") and the regional reliability councils allows those entities to be dominated by vertically integrated utilities. Therefore, confidence in the impartiality of the decisions made by those bodies and the reliability policies, standards, and guidelines issued by those entities is lacking. If ISOs are charged with implementing and enforcing the reliability policies, standards, and guidelines issued by reliability standards organizations dominated by any category of power market participant, then

there will be a lack of confidence in the impartiality of ISO decisions regardless of how independent the ISO itself is.

If ISOs are to be the implementers and enforcers of reliability policies, standards, and guidelines issued by some other entity, then that other entity must be designed with a governance and structure that ensures the decisions it makes are independent of any one market participant or coalition of market participants. Under this approach, all of the independence issues as they apply to ISO governance and structure must also apply to the reliability standards setting entity's governance and structure.

An alternative approach is to assign to the Board of the regional ISO both the responsibility to develop reliability policies, standards, and guidelines and responsibility to implement and enforce those reliability policies, standards, and guidelines. Under this approach, there will be no need for the regional reliability councils. Functions of the regional reliability councils would be completely absorbed by the regional ISOs. This approach is advisable if NERC and regional reliability council reform is untimely or infeasible, or for any other reason there is a lack of confidence in the impartiality of NERC and regional reliability council decisions.

Q. If so, should the rules be determined on a regional or national basis?

A. Regional. The interconnected transmission grid is continental, not national. The continental grid reflects unique regional differences that reliability rules must respect.

The North American electric transmission grid naturally divides itself into identifiable large interconnected regions (e.g., the Western, Eastern and Texas interconnections). These separate regions are connected by only very limited transmission transfer capacity. This situation is likely to not change much in the foreseeable future. The nature of the transmission facilities within the interconnections, on the other hand, often share significant characteristics that are not shared between regions. These circumstances make a regional reliability standards setting and enforcement approach preferable.

Q. What is necessary to ensure that regional ISOs will have access to all information required for them to determine power flows in their region?

A. The ISO must have real-time access to all necessary information. That information should <u>not</u> be filtered through transmission-owning utilities.

Real-time access to information would occur, as a matter of course, if the ISO is also the control area operator for its region. If the ISO is not the control area operator for its region, then other approaches must be taken to ensure that the ISO has sufficient real-time information to determine power flows in its region and thereby have the ability to analyze system security threats. The information that the ISO needs, however, must

flow directly to the ISO rather than flowing through the transmission-owning utilities to the ISO.

It is also necessary for each ISO to have sufficient coordination with all neighboring ISOs or system operators to analyze how the transactions taking place within those systems may affect the local system.

Q. Should the ISO be responsible for both calculating and posting regional ATC values, along with the method and data used to determine these values?

A. Yes.These functions should not be provided by generation/transmission-owning utilities because of the opportunity for discriminatory advantage.

Vertically integrated electric utilities have every incentive to manipulate calculation and posting of ATC values to their (or their affiliates') discriminatory advantage. Removing ATC calculation and posting responsibility from vertically integrated utilities will constitute a major step toward creating a non-discriminatory transmission access policy.

However, the ISO should be responsible for more than merely calculating and posting ATC. For example, the ISO should have responsibility for determining the appropriate facilities ratings that go into the ATC calculation process. The ISO must also have access to sufficient data on a real-time basis.

Q. Should the ISO be allowed to implement voluntary redispatching of resources for transmission loading relief, before pro-rata curtailment?

A. Yes. However, the ISO should also have authority to require redispatch in some circumstances.

The need for line loading relief often arises due to the impacts of unexpected and unscheduled parallel flows. A larger ISO would lead to fewer unexpected or unscheduled transactions because the ISO would be responsible for scheduling transactions over a broader area, and would, therefore, be able to calculate the loop flow effects of a larger number of transactions.

Redispatch is a way to maximize transmission transactions while minimizing the need for transmission line loading relief. If the ISO is not also the control area operator, the ISO should have authority to call for voluntary redispatch through some type of bid-based mechanism. Generators should be compensated for providing redispatch service. The ISO should also have authority to require generator dispatch in circumstances where reliability is threatened. It is most important for the ISO to have dispatch and redispatch authority at times and points of system congestion.

Q. Would a regional ISO, as compared to an individual transmission owner, be able to manage congested interfaces and loop flow issues in a more efficient and non-discriminatory manner?

A. Yes. These situations will be more efficiently internalized within large regional ISOs.

Beneficial effects of internalization of congested interfaces and loop flows are a result of regionalization of system operation, not simply ISO operation of the system. For example, a large transco or gridco could also internalize congested interfaces and loop flows.

Q. The North American Electric Reliability Council has encouraged the development of security coordinators. What rules should apply so that the ISOs' responsibilities for maintaining reliability appropriately complement utilities' obligations to maintain reliability at the retail level?

A. No comment at this time.

The regional ISO should be given the responsibility, the authority, and the capability to act as the security coordinator for its region. Responsibility for reliability should not be divided between the ISO and utility control area operators (if any) within the ISO's region.

With respect to retail reliability, when ISOs are created, the facilities transfer agreement must establish that the ISO will assume responsibility for implementing all retail reliability requirements imposed on transmission-owning utilities by local and state officials, provided that the transmission-owning utility no longer has the authority or capability to so comply due to the facilities transfer.

Q. Would it be preferable for the ISO to be the security coordinator in its region?

A. Yes. If the ISO operates substantial transmission within a region, the ISO should be designated as the security coordinator.

As stated above, a regional ISO should have the responsibility, the authority, and the capability to act as the security coordinator for its region.

Q. Would other entities through entrepreneurial efforts provide better reliability?

A. No.

Participants in power markets have powerful commercial interests in the integrity of the grid system to reliably deliver their power to their customers. At the same time, each participant in power markets has powerful commercial interests in a grid system that is incapable of reliably delivering the power of its competitors. Every reliability rule and every exercise of reliability maintenance responsibility has commercial market

impacts. Therefore, it is folly to rely on any competing market participant to be responsible for establishing reliability rules or imposing reliability maintenance conditions for provision of non-discriminatory transmission service. Reliability rules establishment and reliability maintenance implementation responsibility must fall on some entity without commercial interests in power markets, or interests in any particular power market participant, and whose financial incentives are aligned with nondiscriminatory provision of reliable service to all customers.

If the Commission implements an ISO industry structure, then the ISO should be the regional security coordinator and have responsibility for grid reliability. If the Commission pursues an independent transco or gridco model of industry structure, then other approaches to reliability maintenance and security coordination may be needed, depending on the level of authority the transco or gridco will have to require generator redispatch.

Reliability rules establishment could be a government function because of its "public good" nature. However, a better approach is to establish an independent entity such as a reformed NERC/regional reliability council or an independent regional ISO to perform this function.

Reliability maintenance and security coordination could be a government function because of its "public good" nature. However, it should be possible to create a regulated, private industry structure with appropriately aligned incentives or an ISO structure that would better do the job.

V. ISOs and Transmission Pricing

Q. Should the Commission establish a uniform method for transmission pricing in regional ISOs, or should transmission pricing be considered on a region-by-region basis?

A. No comment at this time.

As stated above, the North American transmission system is characterized by natural regional interconnections (e.g., Western, Eastern, and Texas). These interconnections are characterized by physical and technical similarity within the regions and dissimilarity between the regions. Until technology or markets change to blur these natural regional distinctions, a regional approach to transmission pricing may be warranted. However, boundaries of ISOs using different transmission pricing approaches can constitute economic barriers to power transfers. Therefore, within regions, defined broadly, transmission pricing should be uniform so as to not skew market opportunities even if there are multiple ISOs within the region.

Q. Is it more appropriate for a customer to pay an access charge based on the costs of the transmission owner where the load is located? Or, should the Commission require that access charges be set using a single, uniform rate?

A. With the possible exception of a brief transition period, fairness and comparability will dictate adoption of a single uniform ISO access charge.

In answering this question, the ICC will assume that access charges are intended to recover fixed or sunk costs.

Under the current transmission cost recovery approach, customers get access to the local utility's generation facilities and pay the average cost of the local utility's transmission system as the transmission rate. Under an ISO featuring a non-pancaked, zonal cost recovery approach, the customer obtains access to all generators in the ISO while paying the average cost of transmission facilities in its zone (in most cases, the zones will be designed to consist of traditional utility control areas) as its transmission rate or access charge. Under the uniform, single rate approach to ISO transmission pricing, each customer gets access to all generators in the ISO and pays the average cost of all transmission facilities within the ISO as its transmission rate or access charge.

The zonal pricing approach, in which the customer pays the transmission rate applicable for its zone (and based on the cost of transmission facilities in its zone) in exchange for obtaining access to all generators within the ISO, removes the problem of transmission rate pancaking within the ISO and is fair to all generators within the ISO. Under this type of pricing approach, there are no explicitly recognized locational advantages (in terms of fixed cost recovery) for generators located within the same zone as the customer vis-a-vis generators located elsewhere in the ISO. All generators within the ISO will pay the same base transmission rate to reach any particular customer. This type of zonal approach, however, does not promote comparability between customers in different zones of the ISO.

A single, uniform transmission rate for all transmission service within an ISO promotes comparability between all customers. If a customer is obtaining the benefits of access to a regional power market through the existence of regional grid facilities, then fairness dictates that the customer should pay a regional average cost of transmission. Application of a single, uniform transmission rate approach for access charges still allows locational affects to be represented in the congestion pricing approach and the line losses recovery approach.

Any non-distance-sensitive approach to fixed cost recovery inevitably creates bias in favor of existing large centralized generating facilities vis-a-vis existing smaller distributed generators. However, small distributed generators can reap rewards in the provision of strategic congestion relief and reduced line loss charges.

The Commission's pricing approach to fixed transmission cost recovery should focus on facilitating competition in generation supply and the minimizing the total cost of delivered power. Because the proportion of fixed transmission costs in the overall price of delivered power is relatively small, optimization of transmission pricing efficiency, in and of itself, is a misplaced exercise. The benefits of improved competition in

generation supply facilitated by the approach to transmission pricing are likely to swamp the benefits from marginal improvement in the technical efficiency of transmission pricing for fixed transmission costs.

Q. Should the Commission consider providing for incentive rates of return to the ISO or transmission owners?
A. No comment at this time.

At this time, under an approach in which transmission service is being provided by individual utilities, there is no reason for the Commission to allow monopoly transmission-owner/operators to earn more than the just and reasonable rate of return on facilities devoted to transmission service. Under an approach in which an ISO has authority to direct utilities to construct and own needed transmission facilities, there will be no need for the Commission to allow monopoly transmission owners to earn more than the just and reasonable regulated rate of return on facilities devoted to transmission service. Under an approach in which the ISO is authorized to construct and own transmission facilities, there will be no need for the Commission to allow the monopoly ISO to earn more than the just and reasonable return on facilities devoted to transmission service.

Under an approach in which the need for new facilities construction is put out for bids (under rules in which the ISO either is permitted or not permitted to bid), the winner of the bidding process should be entitled to recover the amount of its bid, rather than the actual cost of the facilities devoted to transmission service. In such cases, however, incentives beyond the just and reasonable rate of return on facilities devoted to transmission service are probably not warranted.

As long as system adequacy needs can be met through either generation-related or transmission-related solutions at least cost, then incentives for transmission-owners beyond the just and reasonable rate of return on facilities are not warranted. However, alternatives to traditional cost of service regulation should continue to be explored.

In no case should FERC use transmission pricing flexibility or return on equity enhancements to induce transmission owners to join an ISO. FERC has sufficient authority under Sections 205 and 206 of the Federal Power Act to require utilities to participate in ISOs and FERC should exercise that authority. The Commission should encourage or require an electric industry structure in which providing reliable transmission service is the focus of the business enterprise, rather than an adjunct to power market participation or a function of government. Incentives could be used as a way to fine-tune that type of private enterprise industry structure.

Q. If so, how should such incentives be structured?
A. No comment at this time.

Providing transmission service is a monopoly and is likely to remain a monopoly for the foreseeable future given the state of generation and transmission technology. All

forms of alternative regulation explored by regulators of other monopoly industries may be appropriate for ISO regulation and should be considered.

The type of incentives policy needed depends on the type of industry structure the Commission decides to pursue. Independent transcos or gridcos, for example, would warrant a different incentive approach than would ISOs because transcos/gridcos have natural incentives to operate the system as a business enterprise.

Q. Should they be designed to maximize throughput on the grid or more general measures of efficiency?
A. No comment at this time.

The appropriate objective functions for maximization may differ depending on the type of industry structure the Commission decides to pursue. It may be appropriate for a non-profit ISO, for example, to optimize a different objective function than would a for-profit ISO. Different forms of the transco or gridco models may also warrant different objective functions. This is the case because of the inter-relatedness of transmission and generation solutions to congestion and the different degrees of integration of generation and transmission in the various industry structure models.

Maximizing transmission revenues is, in and of itself, an inappropriate objective function for an ISO.

Q. Should the Commission encourage a uniform model for pricing transmission congestion?
A. In general, the ICC recommends FERC employ a uniform approach. However, there may be regional or physical systems differences that might make regional methods preferable.

The marginal price at which congestion relief is provided may be the single most powerful price signal sent to interested observers under the regional grid structure. Under a market-oriented approach, the marginal congestion relief price will be of interest to sellers of generation redispatch services, potential builders of generation supply, and potential builders of transmission capacity.

It is, therefore, very important for the Commission to assure itself that the congestion relief pricing approach reflected in regional transmission tariff proposals is acceptable. The ICC does not believe that any congestion relief pricing approach has, thus far, proven itself so overwhelmingly superior that the Commission should mandate its uniform adoption by all ISOs at this time.

Q. Could other transmission entities provide adequate pricing alternatives?
A. No comment at this time.

The pricing of fixed transmission cost recovery and congestion relief are not uniquely ISO issues. Rather, they are regional transmission tariff issues that will arise under the regional transmission tariff, regardless of the entity providing the regional transmission service.

Every transmission pricing approach entails a trade-off of values. A single optimal transmission pricing approach for all circumstances is unlikely to exist. However, there are no insurmountable problems in crafting a transmission pricing policy and congestion relief pricing policy for a transco or gridco or any other type of regional transmission tariff administration.

VI. ISOs and Market Monitoring

Q. Should the Commission require every ISO to have a market monitoring plan?
A. Yes. A market monitoring plan should be associated with every ISO proposal.

The ISO will be best situated to provide the market monitoring function because of the ISO's independence and access to information.

Q. Should a market monitoring plan allow the ISO to detect and report market power abuses (vertical and horizontal), assess undue discrimination in the provision of transmission and ancillary services, and assure compliance with the ISO's rules?
A. Yes. The market monitoring plan should provide for all these monitoring, detection, and assessment functions.

Q. Would it be appropriate to include enforcement mechanisms (e.g., sanctions and mitigation actions) with a monitoring function?
A. Enforcement of transmission-related market power mitigation should be the responsibility of the ISO (with FERC back-up). Enforcement of generation market power mitigation is a regulatory (not ISO) function.

Enforcing generation market power mitigation remedies would constitute a conflict of interest for the ISO. The ISO's role in generation markets should be minimized in order to preserve the ISO's independence and perpetuate the perception of ISO impartiality. Enforcing generation market power mitigation measures should remain the responsibility of appropriate regulatory authorities or anti-trust authorities.

Q. Must the Commission review any ISO-imposed sanction or would it be appropriate to act only upon complaint?
A. The Commission should respond to complaints concerning ISO-imposed sanctions only for transmission-related actions. The ISO

should not be empowered to impose sanctions with respect to generation market power abuses.

The ISO's authority to impose sanctions for transmission-related actions should be made clear in the ISO's bylaws or tariffs.

Q. Are there any limitations on the Commission's authority to permit initial market monitoring to be conducted by ISOs?

A. Yes. First, the Commission may not delegate its statutory obligations to the ISO. Second, federal statutes limit the extent of the Commission's jurisdiction. State authorities have legitimate interests in market monitoring and jurisdiction over some market power mitigation.

FERC cannot delegate authority that it is lawfully obligated to exercise itself. FERC also has no authority to assign responsibilities to the ISO that lawfully reside within State jurisdiction.

Q. Should the Commission rely in the first instance on the ISO to monitor discriminatory behavior?

A. Yes, with respect to discrimination in transmission. No, with respect to discrimination in generation. The generation market monitoring function should not be the exclusive responsibility of the ISO. Other entities, including state regulators, have a role in generation market monitoring.

The ISO should have a role in generation market monitoring due to its independence and its unique access to information. However, state authorities responsible for retail market integrity would be remiss if they placed exclusive reliance on the ISO for market power monitoring of retail power sales markets. This market monitoring and market power mitigation responsibility should fall on state commissions individually and state commissions acting in concert with neighboring state commissions in the region.

Q. Is it necessary and feasible for ISOs to monitor bilateral markets?

A. Some entity should be responsible for monitoring market power in bilateral contracts; the ISO is a logical candidate. Enforcement, however, is a regulatory function.

As stated above, the ISO's role in generation markets should be minimized. This is especially true with respect to bilateral markets. However, the ISO's role will place it in a unique position with respect to information access. It would be imprudent for policy-makers to throw away the benefits of the ISO's unique information access in favor of ISO purity.

Q. Are the potential remedies available to ISOs (e.g., price caps,

bidding caps, loss of bidding privileges) likely to be effective if the underlying problem is structural?

A. No, structural problems call for structural solutions.

Policy-makers should be reasonably certain that the market structure is amenable to competition before generators are deregulated or permitted to charge market-based rates. If the market is not amenable to competition, policy-makers should require structural changes before deregulation or initiation of market-based rates. Imposing price caps, bidding caps, loss of bidding privileges, or other regulatory solutions are re-regulatory methods that will mask the underlying structural defects in the market and delay those structural problems from being addressed. Those regulatory solutions should be imposed only if the costs of effecting a structural solution are too high.

Q. Should there be different market monitoring requirements for ISOs that do not operate centralized energy markets?

A. Yes.

If the ISO is also operating the PX, policy-makers and regulators should place greater reliance on entities other than the ISO for market monitoring. The perception of unbiasedness or impartiality is compromised when the ISO also operates the PX. Therefore, other market monitoring mechanisms should be designed in those cases to bolster the integrity of the market monitoring process.

VII. ISOs and FERC Regulation

Q. Have competitive electricity markets had sufficient time to develop in the two year period since the issuance of Order No. 888 for the Commission now to consider mandating the formation of ISOs?

A. Yes.

In Order 888, the Commission stated,

> if it becomes apparent that functional unbundling is inadequate or unworkable in assuring non-discriminatory open access transmission, we will reevaluate our position and decide whether other mechanisms, such as ISOs, should be required. Order 888 at 60.

It is the ICC's position that Order 888 unbundling alone has proven to be inadequate to ensure non-discriminatory transmission service. The degree of decoupling between transmission facilities operation / transmission service provision and commercial power market participation is not adequate to ensure the provision of non-discriminatory transmission service. Requiring transmission-owner participation in ISOs is one way to improve this decoupling. Transmission service being provided by transmission-owning utilities who are not members of a properly structured ISO is not comparable, and is thereby unduly discriminatory, prejudicial and anti-competitive vis-a-vis the

transmission service that a properly structured ISO would provide on their behalf were those utilities to be members of an appropriately constituted ISO.

The Commission has the necessary statutory authority, primarily under FPA §205 and §206, to find non-comparability and order utilities now providing open access transmission service under their own open access transmission tariffs to become members of a properly structured ISO. A properly structured and appropriately constituted ISO could then be formed and it would provide non-discriminatory open access transmission service under the ISO open access transmission tariff.

The Commission should, therefore mandate participation in properly structured ISOs by all FERC jurisdictional transmission-owning utilities.

Q. Will properly structured and constituted ISOs develop if the Commission continues its policy of encouraging voluntary efforts to create ISOs?

A. No. The voluntary ISO formation process, on a regional basis, has proven to be a failure.

The Midwest ISO is the first, and thus far, only, voluntary regional ISO proposal to be filed with FERC. The California ISO, as well as ISOs created from previously-existing power pools, were motivated by different forces. The simple fact that the Midwest ISO is the only voluntary regional ISO to be filed thus far indicates failure of the voluntary ISO process. The flawed nature of the Midwest ISO proposal clinches this conclusion.

State legislative or regulatory authorities may be able to direct utilities operating in their states to form an ISO or to join an ISO. For example, Illinois enacted a law to require its utilities to be in an ISO. Illinois Law requires that, if Illinois utilities have not filed an application for establishment or participation in a regional ISO by June 30, 1998, or if FERC has not approved such application by March 31, 1999, then a government oversight procedure to form an Illinois-only ISO will be assembled. 220 ILCS 5/16-126.

However, individual states have no authority over utilities not operating in their state. For most areas of the country, regional ISOs, as opposed to single-state ISOs, likely will prove more effective and efficient at obtaining the goals ISOs are intended to obtain. Because state authorities have little or no power to cause regional ISOs to develop, FERC should assist the states in developing appropriately constituted, regional ISOs that will operate under proper terms and conditions.

Appropriately constituted, large regional ISOs will prove most effective and efficient at ensuring the provision of non-discriminatory transmission service over a broad area, maintaining or enhancing regional system reliability, and facilitating regional competitive power markets. While exercise of FERC authority may not be necessary for voluntary regional ISOs to develop, it will be critically necessary for properly structured and appropriately constituted, large regional ISOs to develop.

Unfortunately, the current voluntary nature of regional ISO formation brings regional ISO proposals (if they develop at all) down to a least common denominator (i.e., a proposal that each transmission-owning member can accept as being in its own business interest). This leads directly to ISO proposals reflecting less-than-optimal geographic scope and reflecting improper terms that favor transmission-owning utilities. The Commission needs to step in to ensure that ISOs serve the public interest, and not just utility business interests.

The Commission should not accept any voluntary ISO proposal that reflects inadequate governance, independence, operations, planning, ratemaking, cost recovery, etc. features.

The Commission should remove transmission-owning utilities from the ISO development driver's seat. In the same way as the Commission acted as the driving force to require utilities to provide Order 888 open access transmission, the Commission must act as the driving force to require the provision of transmission service under properly structured and appropriately constituted ISOs.

Q. Would a Commission policy requiring the formation of appropriately sized and properly structured ISOs hasten the development of fully competitive markets?

A. Yes. Illinois is relying heavily on an appropriately constituted ISO to facilitate the development of an "open and efficient marketplace for electric power and energy." 220 ILCS 5/16-126.

As State authorities advance the process of permitting direct access to retail customers by alternative suppliers, the need to expand the market for competitive supply options becomes more urgent. ISOs constitute one way to expand the geographic market for competitive supply. However, if the ISOs are not properly structured and appropriately constituted, the degree of power market competition they support will not be effective.

Q. Would the formation of ISOs allow the Commission to intrude less into grid management and pricing decisions?

A. Yes. Appropriately constituted ISOs will need less regulatory oversight in the areas of grid management and transmission pricing than do vertically-integrated utilities because ISOs have less incentive to discriminate.

It should not be forgotten, however, that ISOs, no matter how benign, will constitute monopolies in the provision of transmission service. Accordingly, ISOs will face many of the same monopoly incentives that other monopolies face. Regulation is necessary to mitigate or prevent the exercise of these types of monopoly power.

Q. The Commission would also like to consider the related issue of

whether all public utilities in a region should be required to participate in an ISO when an ISO proposal is geographically fractured. Should the Commission be concerned if some public utility transmission owners in a region refuse to join the ISO?

A. Yes. Geographically fractured ISOs will not be able to perform efficiently.

For both efficient provision of reliability and facilitation of competitive markets, participation in properly structured regional ISOs by all FERC-jurisdictional transmission owning utilities should be mandatory.

Q. Will a patchwork ISO within a region raise issues of undue discrimination?

A. Yes. A transmission-owning utility's refusal to join an appropriate ISO should be taken as a strong indication that it is acting discriminatorily.

The transmission service being provided by transmission-owning utilities who are not members of a properly structured ISO is not comparable, and is thereby unduly discriminatory, prejudicial and anti-competitive vis-a-vis the transmission service that a properly structured ISO would provide on their behalf were those utilities to be members of an appropriately constituted ISO. Therefore, all transmission-owning utilities should participate in the regional ISO.

Under most transmission pricing arrangements, ISO borders constitute economic barriers. The Commission should, therefore, minimize the extent of ISO borders and require the ISO borders that must remain to be located in areas of minimal opportunity for commercial power transaction activity.

Q. What should the Commission's response be to a proposal that has so many geographic holes that it does not permit effective regional competition and may hinder assurance of reliability?

A. The Commission should require the "holes" to join the ISO so as to make it appropriately sized and properly structured.

The Commission has sufficient authority under Secion 205 and 206 of the Federal Power Act to mandate participation in ISOs by all FERC jurisdictional transmission-owning utilities. FERC should exercise this authority to require properly structured and appropriately constituted ISOs.

Q. Should the Commission define appropriate geographic boundaries for ISOs?

A. Yes, after gathering sufficient evidence in technical conferences regional hearings, or other public procedures.

The proper location of ISO boundaries is likely to be a difficult, but not intractable, problem. The ICC suggests that the degree of transmission interconnectedness and the spatial array of generation/load combinations are important aspects to take into account in defining appropriate ISO boundaries. The Commission should utilize the regional conferences, announced by Chairman Hoecker on April 15, to begin to gather specific information on appropriate ISO boundaries.

Q. Should the Commission require membership in an ISO in order to remedy undue discrimination under Sections 205 and 206 of the Federal Power Act (FPA)?

A. Yes. The Commission has the authority and the obligation to remedy undue discrimination. Transmission service provided other than by an appropriately sized and properly structured ISO is unduly discriminatory and anti-competitive. Such individual transmission-owner and inappropriate ISO transmission service should be discontinued in favor of transmission under appropriate regional ISO tariffs.

The Commission should assert its Section 205/206 authority to mandate ISO participation in the context of the pending Midwest ISO proceeding. The Commission should then proceed to exercise its authority.

Q. Would our authority to remedy undue discrimination be broader if an ISO proposal is geographically incomplete (e.g., if similarly situated customers were paying different transmission service rates -- one pancaked and one not)?

A. Yes, strategic pancaking is evidence of discrimination.

The Commission should not permit strategic pancaking of transmission rates to protect power sales markets from effective competition. This type of behavior by a transmission-owner constitutes strong evidence of undue discrimination.

An appropriately constituted ISO will be large enough to encompass both major concentrations of generation supply as well as major concentrations of load.

Q. What is the Commission's authority in these matters over transmitting utilities that are not public utilities?

A. The Commission should consider employing a conditional reciprocity approach to coax non-FERC-jurisdictional transmission-owning entities into appropriate regional ISOs.

Under existing federal law, the Commission does not have Section 205 and 206 authority over certain types of transmission-owners. Nevertheless, in Order 888, the Commission adopted reciprocity provisions to induce non-FERC-jurisdictional transmission-owning utilities to provide open access transmission. In the same way, FERC should adopt reciprocity provisions to induce non-FERC-jurisdictional

transmission-owning utilities to join appropriately constituted ISOs so that the ISO can provide transmission service on behalf of the non-FERC-jurisdictional utility.

Q. The Commission has strongly encouraged merger applicants to join an appropriate ISO. Would it be appropriate for the Commission to generically find that a merger applicant's participation in an appropriately structured ISO is necessary to find that a merger of jurisdictional facilities is consistent with the public interest under FPA Section 203?

A. Yes. However, the Commission should place primary reliance on its FPA Sections 205 and 206 authority to require utility participation in an ISO. In some merger cases, the Commission will need to impose stronger remedies (for example, transmission facilities divestiture) in order to fulfill its "public interest" conditioning responsibility. The Commission should not lock itself into a policy that limits its merger conditioning (public interest) authority only to an ISO remedy.

The Commission should generically use its merger conditioning authority of Section 203(b) to require transmission-owning utilities proposing a merger to join a properly structured ISO. Similarly, the Commission should use the supplemental orders provision of Section 203(b) to induce existing transmission owning utilities that are the result of a past FERC-approved merger to join a properly structured ISO. These provisions of Section 203, in combination, will cover a major portion of the electric industry given the prevalence of pending merger proposals and mergers approved in the recent past.

Q. Should the Commission continue considering whether ISO membership is necessary in individual merger proceedings?

A. Yes, if the Commission does not generically find that ISO participation is a necessary condition for merger approval.

It is the ICC's position that FERC has sufficient authority under Sections 205 and 206 to require FERC-jurisdictional transmission-owning utilities to participate in a properly structured ISO. The Commission should quickly assert and proceed to exercise that authority. If the Commission proceeds quickly to assert its authority to mandate ISOs under Sections 205 and 206, the Commission will not need to rely heavily on the provisions of Section 203 to accomplish its ISO goals. However, if the Commission does not move quickly to assert its authority to mandate ISOs under Sections 205 and 206, then the Commission should move quickly to proclaim that participation in an appropriate ISO is a minimum condition for approval of any and all proposed mergers. If the Commission does not move quickly to proclaim that participation in an appropriate ISO is a minimum condition for approval of any and all proposed mergers, then the Commission should continue to consider whether ISO participation will constitute a necessary condition for merger approval in individual merger proceedings.

Q. FPA Section 202(a) provides that "the Commission is empowered and directed to divide the country into regional districts for the voluntary interconnection and coordination of facilities for the generation, transmission, and sale of electric energy." This authority currently resides with the Department of Energy (DOE). If DOE were to use its authority, or delegate that authority to the Commission, should Section 202(a) be used to enhance the development of ISOs in a rational, comprehensive manner?

A. Section 202(a) might be one way to establish ISO boundaries. However, the Commission need not rely on Section 202(a) to accomplish its goals. The Commission has sufficient authority under FPA Sections 205 and 206 to accomplish its ISO objectives. The Commission should exercise that authority.

Reliance on FPA Section 202(a) might inject excessive delay into the process of identifying appropriate ISO regions and the appropriate location of ISO boundaries. The Commission need not proceed under Section 202(a) to accomplish its ISO goals. Furthermore, proceeding under Section 202(a) may postpone the accomplishment of those goals.

Q. Would Section 202(a) empower DOE or the Commission to define appropriate geographic boundaries for ISOs?

A. Yes. However, the Commission need not invoke Section 202(a) in order to define appropriate geographic boundaries for ISOs.

See previous Q&A.